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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,195	08/21/2006	Bernhard Lettmann	PAT-01164	1062
77224	7590	04/30/2009	EXAMINER	
Mary E. Golota			SALVITTI, MICHAEL A	
Cantor Colburn LLP				
201 W. Big Beaver Road			ART UNIT	
Suite 1101			PAPER NUMBER	
Troy, MI 48084			1796	
			NOTIFICATION DATE	
			DELIVERY MODE	
			04/30/2009	
			ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

MARJORIE.ELLIS@BASF.COM
Mgolota@CantorColburn.com
usptopatmail@cantorcolburn.com

Office Action Summary

Application No.

10/598,195

Applicant(s)

LETTMANN ET AL.

Examiner

MICHAEL A. SALVITTI

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4-9 and 12-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-9 and 12-20 is/are rejected.
- 7) ☒ Claim(s) 5 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/003)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 5 is objected to because of the following informalities: The first line under (I') contains the phrase "which comprising". This is improper agreement. For the purposes of further examination the claim will be examined on the basis of reading as "comprising" or "which comprises". Appropriate correction is required.

Claim 9 is objected to because of the following informalities: The first line contains "claims 5". For the purposes of further examination, it will be examined on the basis of reading "claim 5". Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 13-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,313,218 to *Fiori et al.*

Regarding claim 1: *Fiori* teaches a multicomponent system curable thermally (col. 11, lines 29-35). This composition comprises:

(I) at least one water-in-oil dispersion comprising water and at least one water-soluble polymeric binder (A) (the polymerization product of butyl acrylate, 2-

hydroxyethyl acrylate, methyl methacrylate and acrylic acid; col. 11, lines 45-55). This binder is in an organic solvent (2-heptanone, 98%; col. 11, line 46). This binder contains at least two isocyanate-reactive functional groups, as evidenced by the incorporation of 2-hydroxyethyl acrylate and acrylic acid into the polymer.

(II) at least one water free liquid component comprising at least one polyisocyanate is present (CYTHANE® 3174, an aliphatic polyisocyanate resin in butyl acetate; col. 18, line 38).

(III) an aqueous binder composition is generated by mixing component I with water (col. 18, lines 40-45).

Regarding claim 2: The water-in-oil dispersion (I) has a water content of less than 40% by weight, as the reaction is in an organic solvent (98% 2-Heptanone; col. 11, line 46).

Regarding claim 18 and 13-17: *Fiori* teaches a method of coating a substrate by applying the composition to a substrate (col. 11, lines 20-25) and curing thermally (col. 11, lines 29-36). As to claim 13, the composition is a clearcoat (col. 11, line 20). As to claims 14-17, the composition is applied to as an automotive refinish application (col. 11, line 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,313,218 to *Fiori et al.*

Regarding claim 5: *Fiori* teaches a process for preparing a multicomponent oil-in-water dispersion (col. 9, line 27 through col. 10, line 25). This composition comprises:

(I') at least one water-free liquid component of a water soluble polymeric binder (A), which is the polymerization product of butyl acrylate, 2-hydroxyethyl acrylate, methyl methacrylate and acrylic acid (col. 11, lines 45-55). This binder is in an organic solvent (2-heptanone; col. 11, line 46). This binder contains at least two isocyanate-reactive functional groups, as evidenced by the incorporation of 2-hydroxyethyl acrylate and acrylic acid into the polymer.

(II) A water free liquid component comprising at least one polyisocyanate is present (CYTHANE® 3174, an aliphatic polyisocyanate resin in butyl acetate; col. 18, line 38).

(III) an aqueous binder composition is generated by mixing component I' with water (col. 18, lines 40-45). This generates the equivalent of component (I).

As to step (2), the water-in-oil dispersion of binder, component (I), is mixed with component II (col. 18, lines 30-40).

As to step (3), the resultant composition (I/II) is mixed with water to generate an oil-in-water dispersion (col. 18, lines 40-50).

Fiori is silent regarding the procedure of mixing the water-free binder (component I') with the aqueous binder composition, as set forth by step (1) of instant claim 5.

However the resulting process generates the same composition regardless of when water is added. Selection of any order of mixing ingredients is evidence of *prima facie* obviousness. See MPEP § 2144.04: *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) and *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930).

Regarding claim 6: Fiori teaches the process of claim 5, but is silent regarding creation of a water-in-oil dispersion having a water content of less than 40% by weight. Fiori teaches that the water-in-oil dispersion has 40% by weight (col. 12, line 17). Although the recited range abuts with the prior art, it is the examiner's position that the values are close enough that one of ordinary skill in the art would have expected the same properties. Case law holds that a *prima facie* case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

Regarding claim 7: Fiori teaches that the mixture of I/III is a water-in-oil dispersion (col. 18, line 33).

Regarding claims 8 and 9: Fiori teaches stirring the mixture of claim 5 (col. 18, line 43). Fiori does not specify whether this occurs manually. MPEP §2144.04 (III) states that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art. The Office is of the position that the converse holds true. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to

manually mix the compound of claim 5, with the motivation being able to closely monitor and control the resulting product.

Regarding claim 12: *Fiori* teaches that a process of curing the oil-in-water dispersion via thermal radiation as a coating material (col. 11, lines 1-40).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,313,218 to *Fiori et al.*

Regarding claim 19: *Fiori* does teach mixing a water-free liquid component of a polymeric binder (A) having at least two isocyanate-reactive functional groups (analogous to component I') followed by addition of water (col. 18, lines 30-50). Four portions of water are used in this process (col. 18, line 41). Although the resulting product is an oil-in-water emulsion after the four portions of water are added (col. 18, line 44), the intermediate product is in fact, a water-in-oil emulsion.

Fiori is silent regarding mixing at least one aqueous component comprising at least one binder (A) in dispersion and/or solution in water (component III) with a water-free liquid component comprising at least one water-soluble and/or water-dispersible oligomeric and/or polymeric binder (A) having at least two isocyanate-reactive functional groups in solution and/or dispersion in at least one organic solvent (component I'). This process generates the same composition regardless of when water is added. Selection of any order of mixing ingredients is evidence of *prima facie* obviousness. See MPEP § 2144.04: *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) and *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930).

Claims 20 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,313,218 to *Fiori et al.*

Regarding claim 20: *Fiori* teaches a process for preparing a thermally curable (col. 11, lines 1-40) multicomponent oil-in-water dispersion (col. 9, line 27 through col. 10, line 25). This composition comprises:

(I') at least one water-free liquid component of a water soluble polymeric binder (A), which is the polymerization product of butyl acrylate, 2-hydroxyethyl acrylate, methyl methacrylate and acrylic acid (col. 11, lines 45-55). This binder is in an organic solvent (2-heptanone; col. 11, line 46). This binder contains at least two isocyanate-reactive functional groups, as evidenced by the incorporation of 2-hydroxyethyl acrylate and acrylic acid into the polymer.

(II) A water free liquid component comprising at least one polyisocyanate is present (CYTHANE® 3174, an aliphatic polyisocyanate resin in butyl acetate; col. 18, line 38).

(III) an aqueous binder composition is generated by mixing component I' with water (col. 18, lines 40-45). This generates the equivalent of component (I).

Components I' and II are mixed, and the addition of water generates component III in situ (col. 18, lines 30-50).

As to step (2), the water-in-oil dispersion of binder, component (I), is mixed with component II (col. 18, lines 30-40).

Fiori is silent regarding the procedure of mixing the water-free binder (component I') with the aqueous binder, component (III), as set forth by step (1) of instant claim 19. However the procedure set forth by *Fiori* generates the same composition regardless of when water is added. Selection of any order of mixing ingredients is evidence of *prima facie* obviousness. See MPEP § 2144.04: *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) and *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930).

Regarding claim 4: *Fiori* teaches stirring the mixture of claim 20 (col. 18, line 43). *Fiori* does not specify whether this occurs manually. MPEP §2144.04 (III) states that broadly providing an automatic or mechanical means to replace a manual activity which accomplished the same result is not sufficient to distinguish over the prior art. The Office is of the position that the converse holds true. At the time of the invention, it would have been obvious to a person having ordinary skill in the art to manually mix the compound of claim 20, with the motivation being able to closely monitor and control the resulting product.

Response to Arguments

A) Corrections to the specification and claims have been noted. Any rejections and/or objections made in the previous Office Action and not repeated, are hereby withdrawn.

B) Applicant's arguments filed 1/30/2009 have been fully considered but they are not persuasive.

On pages 8 through 10 of the "Remarks", with regard to claim 1, the applicant argues that *Fiori* does not teach an aqueous binder, analogous to component (III) in '218. Upon mixing of the components with water, as *Fiori* specifies (col. 18, line 40), a composition inherently dispersed in water is formed. This inherency leads to a substantially identical product, serving as a basis for the 102(b) rejection. "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established." *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). See MPEP § 2112.01. In the broadest reasonable interpretation component I, can be read as a dispersion of III

C) On pages 11-12 of the "Remarks", with regard to claim 5, the applicant argues that *Fiori* does not teach an aqueous binder, component III. As noted above, the broadest reasonable interpretation component I can be read as a dispersion of III. Aqueous binder is created as an artifact of the order of mixing taught by *Fiori*. Selection of any order of mixing ingredients is evidence of *prima facie* obviousness. See MPEP § 2144.04.

D) On page 12 of the "Remarks", with regard to claims 4, 8 and 9, the Examiner is of the opinion that the limitations of claims 1, 5, 19 and 20 have been anticipated or are obvious in view of *Fiori*. *Fiori* does not specify whether the processes were performed manually or automatically, but performing a procedure manually would have been obvious to a person having ordinary skill in the art at the time of the invention. A person of ordinary skill would manually perform a process with the motivation of being able to better monitor the composition, allowing for on-the-spot adjustments.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. SALVITTI whose telephone number is (571)270-7341. The examiner can normally be reached on Monday-Thursday 8AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on (571) 272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo/
Supervisory Patent Examiner, Art Unit 1796

/M. A. S./
Examiner, Art Unit 1796